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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,438	01/30/2004	Hidetoshi Tanaka	TSUT 0027	7227

7590 07/26/2005
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EXAMINER	
GONZALEZ, JULIO C	
ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/767,438

Applicant(s)

TANAKA ET AL.

Examiner

Julio C. Gonzalez

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 is/are allowed.
- 6) ☒ Claim(s) 6-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 6 recites the limitation "third electrodes" and "fourth electrodes" in page 29. There is insufficient antecedent basis for this limitation in the claim. It may seem as if claim 6 discloses the distance between the first and second electrode only.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over of Hartemann et al (US 4,515,016) in view of Tavkhelidze et al (US 6,720,704).

Hartemann et al discloses a vibrator having a first and second electrode, a vibrator (see figure 5), a base 1, a pedestal 2, a mass 27 and two plates (see figure 5), which support and sandwich mass 27.

However, Hartemann et al does not disclose explicitly having an electrode terminal connected to each electrode.

On the other hand, Tavkhelidze et al discloses for the purpose of effectively spacing electrodes at close proximity, electrodes 1,5, electrode terminal 27 connected to electrodes 1, 5, which performs an input/output of charges (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a vibrator as disclosed by Hartemann et al and to use the teachings of Tavkhelidze et al of having a terminal for the electrodes providing an input/output of charges for the purpose of effectively spacing electrodes at close proximity.

5. Claims 7, 8, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartemann et al and Tavkhelidze et al as applied to claims 6 and 12 above, and further in view of Kasahara et al (US 2001/0028203).

The combined vibrator discloses all of the elements above. However, the combined vibrator does not disclose that the base has contact prevention devices.

On the other hand, Kasahara et al discloses for the purpose of preventing short circuits between electrodes, stoppers 10 for preventing contact between electrodes 22A and 30A (see figures 13A, 18A).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined vibrator as disclosed above and to use stoppers for the purpose of preventing short circuits between electrodes as disclosed by Kasahara et al.

6. Claims 9, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartemann et al and Tavkhelidze et al as applied to claim 6 above, and further in view of ordinary skill in the art.

The combined vibrator discloses all of the elements above. However, the combined vibrator does not disclose using two or more supports for the mass.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the above vibrator by duplicating the support plates, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Allowable Subject Matter

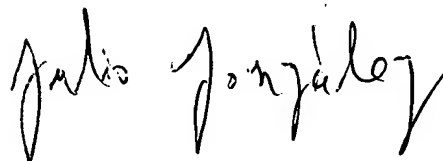
7. Claims 1, 2, 3, 4 and 5 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is 571-272-2024. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Julio Gonzalez". The signature is fluid and cursive, with the first name "Julio" and last name "Gonzalez" clearly distinguishable.

Julio C. Gonzalez
Examiner
Art Unit 2834

Jcg

July 22, 2005